-- 21. (new) A method of evaluating a scattered light signal generated by a scattered light receiver when detecting especially fine particles in a carrier medium, comprising running the scattered light signal through a filter algorithm to evaluate the scattered light signal subject to specific filter algorithms, the filter algorithm operation being based on a slope of the scattered light signal.

22. (new) The method according to claim 21, wherein the scattered light signal is run through a calibration operation to calibrate the scattered light signal with a reference signal, a drift compensation operation to adapt the scattered light signal to prevailing environmental conditions over a time period of at least 24 hours, a temperature compensation operation to compensate for the temperature dependency of the radiated light output of a light source, and/or a sensitivity adjusting operation to adapt the scattered light signal to a required sensitivity.

23. (new) The method according to claim 22, wherein the scattered light signal is low-pass filtered when a slope thereof exceeds a pre-defined threshold.

24. (new) The method according to claim 22, wherein a chamber value is averaged over a relatively long period of time in the drift compensation operation to create a tracked chamber value.

25. (new) The method according to claim 22, wherein the carrier medium flows along a flow path and a temperature sensor arranged in the flow path of the carrier medium is used for the temperature compensation in the temperature compensation operation of the scattered light signal.

26. (new) The method according to claim 25, wherein the temperature compensation operation comprises changing a pulse width of a drive current of a light source associated with the scattered light receiver.

27. (new) The method according to claim 22, wherein an integration amplifier acts as a scattered light amplifier, the integration time of the integration amplifier is set in the calibration operation, and wherein the scattered light signal corresponds to a reference signal of a reference indicator.

28. (new) The method according to claim 27, wherein the sensitivity of the scattered light receiver is changed in the sensitivity adjusting operation by changing the integration time in the integration amplifier.

29. (new) The method according to claim 28, wherein the changing of the integration time is incremental or continuous.

30. (new) The method according to claim 22, wherein the sensitivity of the scattered light receiver is changed in the sensitivity adjusting operation by changing a pulse width of a drive current of a light source associated with the scattered light receiver.

31. (new) The method according to claim 30, wherein the changing of the pulse width is incremental or continuous.

32. (new) A scattered light detector comprising:

a housing;

an inlet opening and an outlet opening in the housing, between which a carrier medium flows along a flow path;

a light source which directs light to a scattered light center lying in the flow path;

a scattered light receiver to receive a portion of the light scattered on particles in the scattered light center;

a scattered light signal amplifier to amplify the scattered light signal, the scattered light signal amplifier being configured as an integration amplifier; and

means for providing a filter algorithm operation to filter the scattered light based on a slope thereof.

33. (new) A scattered light detector according to claim 32, further comprising switching means for setting the sensitivity of the scattered light receiver.

34. (new) A scattered light detector according to claim 32, further comprising a communication interface to communicate with a desktop or a notebook PC.

35. (new) A scattered light detector according to claim 32, further comprising a switch input for changing the sensitivity of the scattered light receiver.

36. (new) A scattered light detector according to claim 32, further comprising a temperature sensor arranged in the flow path of the carrier medium.

37. (new) A scattered light detector according to claim 32, further comprising a flow meter arranged in the flow path of the carrier medium.

38. (new) A scattered light detector according to claim 37, wherein the flow meter comprises a thermoelectric air flow sensor and a thermoelectric temperature sensor.

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